SEQUENCE LISTING

```
<110> INCYTE PHARMACEUTICALS, INC.
      HILLMAN, Jennifer L.
     BANDMAN, Olga
     GUEGLER, Karl J.
      CORLEY, Neil C.
     BAUGHN, Mariah R.
     AZIMZAI, Yalda
     LAL, Preeti
     LY, Dyung Aina M.
<120> HUMAN PHOSPHOLIPASES
<130> PF-0625 PCT
<140> To Be Assigned
<141> Herewith
<150> 09/181,317; unassigned; 09/234,726; unassigned
<151> 1998-10-27; 1998-10-27; 1999-01-21; 1999-01-21
<160> 9
<170> PERL Program
<210> 1
<211> 145
<212> PRT
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2641779CD1
<400> 1
Met Glu Leu Ala Leu Leu Cys Gly Leu Val Val Met Ala Gly Val
                                      10
Ile Pro Ile Gln Gly Gly Ile Leu Asn Leu Asn Lys Met Val Lys
                                      25
                                                          30
Gln Val Thr Gly Lys Met Pro Ile Leu Ser Tyr Trp Pro Tyr Gly
                 35
Cys His Cys Gly Leu Gly Gly Arg Gly Gln Pro Lys Asp Ala Thr
Asp Trp Cys Cys Gln Thr His Asp Cys Cys Tyr Asp His Leu Lys
Thr Gln Gly Cys Gly Ile Tyr Lys Asp Tyr Tyr Arg Tyr Asn Phe
                 80
                                      85
Ser Gln Gly Asn Ile His Cys Ser Asp Lys Gly Ser Trp Cys Glu
Gln Gln Leu Cys Ala Cys Asp Lys Glu Val Ala Phe Cys Leu Lys
                                     115
Arg Asn Leu Asp Thr Tyr Gln Lys Arg Leu Arg Phe Tyr Trp Arg
                125
```

Pro His Cys Arg Gly Gln Thr Pro Gly Cys 140 145

<210> 2

<211> 605 <212> PRT <213> Homo sapiens <220> <221> misc_feature <223> Incyte ID No: 1430683CD1 <400> 2 Met Ile Phe Val Glu Leu Ser Pro Thr Leu Ala Leu Cys Leu Glu Arg Val Ala Ser His Leu Thr Asp Thr Gly Leu Leu Val Leu Phe 25 Cys Pro Ala Pro Cys Pro Phe Phe Phe Phe Glu Met Glu Ser 35 40 Leu Ser Val Ala Gln Ala Gly Val Gln Trp Arg Asp Leu Gly Ser 55 Leu Gln Pro Pro Pro Leu Gly Phe Lys Arg Phe Ser Cys Leu Ser 65 70 Leu Pro Ser Ser Trp Asp Tyr Arg Leu Arg Glu Leu Ala Val Arg 80 85 Leu Gly Phe Gly Pro Cys Ala Glu Glu Gln Ala Phe Leu Ser Arg 95 100 Arg Lys Gln Val Val Ala Ala Ala Leu Arg Gln Ala Leu Gln Leu 110 115 Asp Gly Asp Leu Gln Glu Asp Glu Ile Pro Val Val Ala Ile Met 130 Ala Thr Gly Gly Ile Arg Ala Met Thr Ser Leu Tyr Gly Gln 145 Leu Ala Gly Leu Lys Glu Leu Gly Leu Leu Asp Cys Val Ser Tyr 160 Ile Thr Gly Ala Ser Gly Ser Thr Trp Ala Leu Ala Asn Leu Tyr 170 175 Glu Asp Pro Glu Trp Ser Gln Lys Asp Leu Ala Gly Pro Thr Glu 190 Leu Leu Lys Thr Gln Val Thr Lys Asn Lys Leu Gly Val Leu Ala 200 205 Pro Ser Gln Leu Gln Arg Tyr Arg Gln Glu Leu Ala Glu Arg Ala 215 220 Arg Leu Gly Tyr Pro Ser Cys Phe Thr Asn Leu Trp Ala Leu Ile 230 235 Asn Glu Ala Leu Leu His Asp Glu Pro His Asp His Lys Leu Ser 245 250 Asp Gln Arg Glu Ala Leu Ser His Gly Gln Asn Pro Leu Pro Ile 265 Tyr Cys Ala Leu Asn Thr Lys Gly Gln Ser Leu Thr Thr Phe Glu 280 Phe Gly Glu Trp Cys Glu Phe Ser Pro Tyr Glu Val Gly Phe Pro 290 295 300

```
Lys Tyr Gly Ala Phe Ile Pro Ser Glu Leu Phe Gly Ser Glu Phe
               305
                                   310
Phe Met Gly Gln Leu Met Lys Arg Leu Pro Glu Ser Arg Ile Cys
               320
                                   325
Phe Leu Glu Gly Ile Trp Ser Asn Leu Tyr Ala Ala Asn Leu Gln
               335
                                   340
Asp Ser Leu Tyr Trp Ala Ser Glu Pro Ser Gln Phe Trp Asp Arg
               350
                                   355
Trp Val Arg Asn Gln Ala Asn Leu Asp Lys Glu Gln Val Pro Leu
               365
                                   370
Leu Lys Ile Glu Glu Pro Pro Ser Thr Ala Gly Arg Ile Ala Glu
               380
                                   385
Phe Phe Thr Asp Leu Leu Thr Trp Arg Pro Leu Ala Gln Ala Thr
                                    400
His Asn Phe Leu Arg Gly Leu His Phe His Lys Asp Tyr Phe Gln
His Pro His Phe Ser Thr Trp Lys Ala Thr Thr Leu Asp Gly Leu
                                    430
Pro Asn Gln Leu Thr Pro Ser Glu Pro His Leu Cys Leu Leu Asp
               440
                                   445
Val Gly Tyr Leu Ile Asn Thr Ser Cys Leu Pro Leu Leu Gln Pro
                                   460
Thr Arg Asp Val Asp Leu Ile Leu Ser Leu Asp Tyr Asn Leu His
               470
                                   475
Gly Ala Phe Gln Gln Leu Gln Leu Gly Arg Phe Cys Gln Glu
               485
                                   490
Gln Gly Ile Pro Phe Pro Pro Ile Ser Pro Ser Pro Glu Glu Gln
               500
                                   505
Leu Gln Pro Arg Glu Cys His Thr Phe Ser Asp Pro Thr Cys Pro
               515
                                   520
Gly Ala Pro Ala Val Leu His Phe Ser Ser Gly Val Arg Arg Thr
                                    535
Pro Glu Glu Ala Ala Gly Glu Val Asn Leu Ser Ser Asp
                                    550
Ser Pro Tyr His Tyr Thr Lys Val Thr Tyr Ser Gln Glu Asp Val
                                   565
Asp Lys Leu His Leu Thr His Tyr Asn Val Cys Asn Asn Gln
               575
                                   580
Glu Gln Leu Leu Glu Ala Leu Arg Gln Ala Val Gln Arg Arg
               590
                                   595
                                                        600
Gln Arg Arg Pro His
               605
```

- <210> 3
- <211> 456
- <212> PRT
- <213> Homo sapiens
- <220>
- <221> misc_feature
- <223> Incyte ID No: 1316804CD1

<400> 3 Met Pro Pro Gly Pro Trp Glu Ser Cys Phe Trp Val Gly Gly Leu Ile Leu Trp Leu Ser Val Gly Ser Ser Gly Asp Ala Pro Pro Thr 25 Pro Gln Pro Lys Cys Ala Asp Phe Gln Ser Ala Asn Leu Phe Glu 35 40 Gly Thr Asp Leu Lys Val Gln Phe Leu Leu Phe Val Pro Ser Asn 55 Pro Ser Cys Gly Gln Leu Val Glu Gly Ser Ser Asp Leu Gln Asn 65 70 Ser Gly Phe Asn Ala Thr Leu Gly Thr Lys Leu Ile Ile His Gly 85 Phe Arg Val Leu Gly Thr Lys Pro Ser Trp Ile Asp Thr Phe Ile 100 Arg Thr Leu Leu Arg Ala Thr Asn Ala Asn Val Ile Ala Val Asp 115 Trp Ile Tyr Gly Ser Thr Gly Val Tyr Phe Ser Ala Val Lys Asn 125 130 Val Ile Lys Leu Ser Leu Glu Ile Ser Leu Phe Leu Asn Lys Leu 145 Leu Val Leu Gly Val Ser Glu Ser Ser Ile His Ile Ile Gly Val 155 160 Ser Leu Gly Ala His Val Gly Gly Met Val Gly Gln Leu Phe Gly 170 175 Gly Gln Leu Gly Gln Ile Thr Gly Leu Asp Pro Ala Gly Pro Glu 185 190 Tyr Thr Arg Ala Ser Val Glu Glu Arg Leu Asp Ala Gly Asp Ala 200 205 Leu Phe Val Glu Ala Ile His Thr Asp Thr Asp Asn Leu Gly Ile 215 220 Arg Ile Pro Val Gly His Val Asp Tyr Phe Val Asn Gly Gly Gln 230 235 Asp Gln Pro Gly Cys Pro Thr Phe Phe Tyr Ala Gly Tyr Ser Tyr Leu Ile Cys Asp His Met Arg Ala Val His Leu Tyr Ile Ser Ala 265 Leu Glu Asn Ser Cys Pro Leu Met Ala Phe Pro Cys Ala Ser Tyr 275 280 Lys Ala Phe Leu Ala Gly Arg Cys Leu Asp Cys Phe Asn Pro Phe 290 295 Leu Leu Ser Cys Pro Arg Ile Gly Leu Val Glu Gln Gly Gly Val 305 310 Lys Ile Glu Pro Leu Pro Lys Glu Val Lys Val Tyr Leu Leu Thr 320 325 Thr Ser Ser Ala Pro Tyr Cys Met His His Ser Leu Val Glu Phe 335 340 His Leu Lys Glu Leu Arg Asn Lys Asp Thr Asn Ile Glu Val Thr 350 355 Phe Leu Ser Ser Asn Ile Thr Ser Ser Ser Lys Ile Thr Ile Pro 370 Lys Gln Gln Arg Tyr Gly Lys Gly Ile Ile Ala His Ala Thr Pro 385 Gln Cys Gln Ile Asn Gln Val Lys Phe Lys Phe Gln Ser Ser Asn 400

```
Arg Val Trp Lys Lys Asp Arg Thr Thr Ile Ile Gly Lys Phe Cys
                410
                                    415 .
Thr Ala Leu Leu Pro Val Asn Asp Arg Glu Lys Met Val Cys Leu
                                    430
                                                         435
Pro Glu Pro Val Asn Leu Gln Ala Ser Val Thr Val Ser Cys Asp
                440
                                    445
Leu Lys Ile Ala Cys Val
                455
<210> 4
<211> 592
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 2641779CB1
<400> 4
tetgeeteea etgetetgtg etgggateat ggaacttgea etgetgtgtg ggetggtggt 60
gatggctggt gtgattccaa tccagggcgg gatcctgaac ctgaacaaga tggtcaagca 120
agtgactggg aaaatgccca tcctctccta ctggccctac ggctgtcact gcqqactaqq 180
tggcagaggc caacccaaag atgccacgga ctggtgctgc cagacccatg actgctgcta 240
tgaccacctg aagacccagg ggtgcggcat ctacaaggac tattacagat acaacttttc 300
ccaggggaac atccactgct ctgacaaggg aagctggtgt gagcagcagc tgtgtgcctg 360
tgacaaggag gtggccttct gcctgaagcg caacctggac acctaccaga agcgactgcg 420
tttctactgg cggccccact gccgggggca gacccctggg tgctagaagc ccacaccctc 480
taccetgtte etcageatgg agetetggea tecceacete agtatetaac etgaaceage 540
ctggcttttc aaacactccg gggggaggta gtcccagcct cccccggaac cc
<210> 5
<211> 2204
<212> DNA
<213> Homo sapiens
<220>
<221> unsure
<222> 28, 30
<223> a or g or c or t, unknown, or other
<220>
<221> misc_feature
<223> Incyte ID No: 1430683CB1
<400> 5
catggtttgg ggcgcagaga gggcaggnan accaagggag agaagagggg aaattgcgcc 60
cttttgggtg gaagctgtta tggctggacc ttaaatgatc ttcgtagagt tgtcgcccac 120
cctggccctc tgtcttgaga gagtggcttc tcacctcaca gacacaggat tattggtcct 180
tttctgcccc gcccctgcc ctttttttt tttttttgag atggagtctc tctctgtcgc 240
ccaggctgga gtgcaatggc gtgatcttgg ctcactgcaa cctccgcctc tggggttcaa 300
gcgattetee tgeeteagee teeegagtag etgggattae agaetgaggg agetggeegt 360
gcgactgggc ttcgggccct gtgcagagga gcaggccttc ctgagcagga ggaagcaggt 420
ggtggccgcg gccttgaggc aggccctgca gctggatgga gacctgcagg aggatgagat 480
```

```
cccagtggta gctattatgg ccactggtgg tgggatccgg gcaatgactt ccctgtatgg 540
gcagctggct ggcctgaagg agctgggcct cttggattgc gtctcctaca tcaccggggc 600
ctcgggctcc acctgggcct tggccaacct ttatgaggac ccagagtggt ctcagaagga 660
cctggcaggg cccactgagt tgctgaagac ccaggtgacc aagaacaagc tgggtgtgct 720
ggcccccagc cagctgcagc ggtaccggca ggagctggcc gagcgtgccc gcttgggcta 780
cccaagetge ttcaccaace tgtgggeeet catcaacgag gegetgetge atgatgagee 840
ccatgatcac aageteteag atcaaeggga ggeeetgagt catggeeaga accetetgee 900
catctactgt gccctcaaca ccaaagggca gagcctgacc acttttgaat ttggggagtg 960
gtgcgagttc tctccctacg aggtcggctt ccccaagtac ggggccttca tcccctctga 1020
gctctttggc tccgagttct ttatggggca gctgatgaag aggcttcctg agtcccgcat 1080
ctgcttctta gaaggtatct ggagcaacct gtatgcagcc aacctccagg acagcttata 1140
ctgggcctca gagcccagcc agttctggga ccgctgggtc aggaaccagg ccaacctgga 1200
caaggagcag gtcccccttc tgaagataga agaaccaccc tcaacagccg gcagaatagc 1260
tgagtttttc accgatette tgaegtggeg tecaetggee caggecacae ataattteet 1320
gcgtggcctc catttccaca aagactactt tcagcatcct cacttctcca catggaaagc 1380
taccactetg gatgggetee ecaaceaget gacacceteg gageeceace tgtgcetget 1440
ggatgttggc tacctcatca ataccagctg cctgcccctc ctgcagccca ctcgggacgt 1500
ggacctcatc ctgtcattgg actacaacct ccacggagcc ttccagcagt tgcagctcct 1560
gggccggttc tgccaggagc aggggatccc gttcccaccc atctcgccca gccccgaaga 1620
geageteeag cetegggagt gecacacett eteegaceee acetgeeeeg gageeeetge 1680
ggtgctgcac ttttcctctg gggtccggcg gacacccgag gaggcggcag ctggggaggt 1740
gaacctgtct tcatcggact ctccctacca ctacacgaag gtgacctaca gccaggagga 1800
cgtggacaag ctgctgcacc tgacacatta caatgtctgc aacaaccagg agcagctgct 1860
ggaggetetg egecaggeag tgeageggag geggeagege aggeeceaet gatggeeggg 1920
geceetgeca eccetaaete teatteatte eetggetget gagttgeagg tgggaaetgt 1980
catcacgcag tgcttcagag cctcgggctc aggtggcact gtcccagggt ccaggctgag 2040
ggctgggagc tecettgege etcageagtt tgcagtgggg taaggaggee aageceattt 2100
gtgtaatcac ccaaaacccc ccggcctgtg cctgttttcc cttctgcgct accttgagta 2160
gttggagcac ttgatacatc acagactcat acaaaaaaaa aaaa
<210> 6
<211> 1746
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<223> Incyte ID No: 1316804CB1
cagetetgag atttecaget cagegatgee eccaggtece tgggagaget gettetgggt 60
ggggggcctc attttgtggc tcagcgttgg aagttcaggg gatgcacctc ctaccccaca 120
gccaaagtgc gctgacttcc agagcgccaa cctttttgaa ggcaccgatc tcaaagtcca 180
gtttctcctc tttgtccctt cgaatcctag ctgtgggcag ctagtagaag gaagcagtga 240
cctccaaaac tctgggttca atgccactct gggaaccaaa ctaattatcc atggattcag 300
ggttttagga acaaagcctt cctggattga cacatttatt agaacccttc tgcgtgcaac 360
gaatgctaat gtgattgccg tggactggat ttatgggtct acaggagtct acttctcagc 420
tgtgaaaaat gtgattaagt tgagcctcga gatctccctt ttcctcaata aactcctggt 480
gctgggtgtg tcggaatcct caatccacat cattggtgtt agcctggggg cccacgttgg 540
gggcatggtg ggacagetet teggaggeea getgggacag ateacaggee tggaceege 600
tggacctgag tacaccaggg ccagtgtgga agagcgcttg gatgctggag atgccctctt 660
cgtggaagcc atccacacag acaccgacaa tttgggtatt cggattcccg ttggacatgt 720
ggactacttc gtcaacggag gccaagacca acctggctgc cccaccttct tttacgcagg 780
ttatagttat ctgatctgtg atcacatgag ggctgtgcac ctctacatca gcgccctgga 840
```

```
gaatteetgt ecaetgatgg cettteeetg tgecagetac aaggeettee ttgetggacg 900
ctgtctggat tgctttaacc cttttctgct ttcctgccca aggataggac tggtggaaca 960
aggtggtgtc aagatagagc cgctccccaa ggaagtgaaa gtctacctcc tgactacttc 1020
cagtgctccg tactgcatgc atcacagcct cgtggagttt cacttgaagg aactgagaaa 1080
caaggacacc aacatcgagg ttaccttcct tagcagtaac atcacctctt catctaagat 1140
caccatacct aagcagcaac gctatgggaa aggaatcata gcccatgcca ccccacaatg 1200
ccagataaac caagtgaaat tcaagtttca gtcttccaac cgagtttgga aaaaagaccg 1260
gactaccatt attgggaagt tetgcactge cettttgeet gteaatgaca gagaaaagat 1320
ggtctgctta cctgaaccag tgaacttaca agcaagtgtg actgtttcct gtgacctgaa 1380
gatageetgt gtgtagttta acctgggeag gacacatete eetgcatttt tttttttt 1440
tgagagagag gtgtgatgag ggatgtgtgt gtgcagctta ttgtagacca ttactactaa 1500
ggagaaaagc aaagctcttt cttattttcc tcataatcag ctaccctgga ggggagggag 1560
aactcatttt acagaacttg gtttcctttg ccgatcttat gtacataccc attttagctt 1620
teccatgeat acttaactge acttgettta teteettggg cattegtaet taggatteaa 1680
tagaaacatg tacagggtaa acaatttttt aaaaataaaa cttcatggag tatctgaaaa 1740
aaaaaa
<210> 7
<211> 146
<212> PRT
<213> Rattus norvegicus
<300>
<308> q204319
<400> 7
Met Lys Val Leu Leu Leu Ala Val Val Ile Met Ala Phe Gly
                                     10
Ser Ile Gln Val Gln Gly Ser Leu Leu Glu Phe Gly Gln Met Ile
Leu Phe Lys Thr Gly Lys Arg Ala Asp Val Ser Tyr Gly Phe Tyr
                                     40
                                                         45
Gly Cys His Cys Gly Val Gly Gly Arg Gly Ser Pro Lys Asp Ala
                 50
                                     55
Thr Asp Trp Cys Cys Val Thr His Asp Cys Cys Tyr Asn Arg Leu
                                     70
Glu Lys Arg Gly Cys Gly Thr Lys Phe Leu Thr Tyr Lys Phe Ser
                 80
                                     85
```

Tyr Arg Gly Gly Gln Ile Ser Cys Ser Thr Asn Gln Asp Ser Cys

Arg Lys Gln Leu Cys Gln Cys Asp Lys Ala Ala Ala Glu Cys Phe

Ala Arg Asn Lys Lys Ser Tyr Ser Leu Lys Tyr Gln Phe Tyr Leu

95

110

125

140

Asn Lys Phe Cys Lys Gly Lys Thr Pro Ser Cys

<210> 8 <211> 748 <212> PRT <213> Gallus gallus 100

115

130

145

105

120

135

<300> <308> g508625

Met Ser Phe Ile Asp Pro Tyr Gln His Ile Val Val Glu His Gln Tyr Ser His Val Phe Thr Val Thr Val Arg Lys Ala Thr Asn Val 20 Thr Lys Gly Ala Ile Gly Asp Met Leu Asp Thr Pro Asp Pro Tyr 35 40 Val Glu Leu Phe Ile Pro Ser Ala Pro Asp Cys Arg Lys Arg Thr 50 Lys His Phe Asn Asn Asp Val Asn Pro Val Trp Asn Glu Thr Phe Glu Phe Ile Leu Asp Pro Asn Gln Asp Asn Val Leu Glu Val Thr Leu Met Asp Ala Asn Tyr Val Met Asp Glu Thr Leu Gly Met Ala 95 100 Thr Phe Pro Ile Ser Ser Leu Lys Leu Gly Glu Lys Lys Glu Val 110 115 Gln Leu Thr Phe Asn Asn Val Thr Glu Met Thr Leu Glu Leu Ser 125 130 Leu Glu Val Cys Ser Ser Thr Asp Leu Arg Phe Ser Met Ala Leu 140 145 Cys Asp Glu Glu Lys Lys Phe Arg Gln Gln Arg Lys Asp Asn Ile 155 160 Met Gln Ser Met Lys Ser Phe Leu Gly Glu Glu Asn Ser Lys Asn 170 175 Leu Thr Thr Ser Arg Asp Val Pro Val Ile Ala Val Leu Gly Ser 185 190 Gly Gly Phe Arg Ala Met Val Gly Phe Ala Gly Val Met Lys Ala Leu Tyr Glu Ser Gly Val Leu Asp Cys Ala Thr Tyr Ile Ala Gly Leu Ser Gly Ser Thr Trp Tyr Met Ser Thr Leu Tyr Ser His Pro Asp Phe Pro Glu Lys Gly Pro Lys Glu Ile Asn Gln Glu Leu 245 250 Met Asn Ser Val Ser His Asn Pro Leu Leu Leu Leu Thr Pro Gln 260 265 Lys Val Lys Arg Tyr Ile Glu Ala Leu Trp Asn Lys Lys Ser Ser 275 280 Gly Gln Pro Val Thr Phe Thr Asp Ile Phe Gly Met Leu Ile Gly 290 295 Glu Thr Leu Ile His Asn Arg Met Asp Thr Thr Leu Ser Asp Met 305 310 Lys Glu Lys Val Ser Glu Ala Gln Cys Ala Leu Pro Leu Phe Thr 320 325 Cys Leu His Val Lys Pro Asp Val Ser Glu Leu Met Phe Ala Asp 340 Trp Val Glu Phe Ser Pro Tyr Glu Ile Gly Met Ala Lys Tyr Gly Thr Phe Met Ser Pro Asp Leu Phe Gly Ser Lys Phe Phe Met Gly

```
Thr Val Val Lys Lys Tyr Ser Glu Asn Pro Leu His Phe Leu Met
                380
                                   385
Gly Val Trp Gly Ser Ala Phe Ser Ile Leu Phe Asn Arg Val Leu
                                    400
Gly Val Ser Asn Ser Gln Asn Lys Gly Pro Thr Met Glu Glu Glu
                410
                                    415
Leu Glu Asn Ile Arg Leu Lys His Leu Val Ser Asn Asp Ser Ser
                425
                                    430
Asp Ser Glu Asp Glu Ser Gln His Pro Lys Gly Thr Glu Asn Ser
                440
                                    445
Glu Ala Asn Glu Glu Tyr Gln Asn Ser Ser Gln Glu Ser Trp Val
                455
                                    460
Gln Arg Met Leu Met Ala Leu Val Gly Asp Ser Ala Leu Phe Asn
                                    475
Thr Arg Glu Gly Arg Ala Gly Lys Val His Asn Phe Met Leu Gly
Leu Asn Leu Asn Ser Cys Tyr Pro Leu Ser Pro Leu Ala Asp Leu
                                    505
Leu Thr Gln Glu Ser Val Glu Glu Asp Glu Leu Asp Ala Ala Val
                515
                                    520
Ala Asp Pro Asp Glu Phe Glu Arg Ile Tyr Glu Pro Leu Asp Val
                530
                                    535
Lys Ser Lys Lys Ile His Ile Val Asp Ser Gly Leu Thr Phe Asn
                545
                                    550
Leu Pro Tyr Pro Leu Ile Leu Arg Pro Gln Arg Gly Val Asp Leu
                560
                                    565
Ile Ile Ser Phe Asp Phe Ser Ala Arg Pro Ser Asp Ser Ser Pro
                575
                                    580
Pro Phe Lys Glu Ile Leu Leu Ala Glu Lys Trp Ala Lys Met Asn
                590
                                    595
Lys Leu Pro Phe Pro Lys Ile Asp Pro Asn Val Phe Asp Arg Glu
                                    610
Gly Leu Lys Glu Cys Tyr Val Phe Lys Pro Lys Asp Thr Ser Ser
                620
                                    625
Glu Lys Asp Cys Pro Thr Ile Ile His Phe Val Leu Ala Asn Ile
                                    640
Asn Phe Arg Lys Tyr Lys Ala Pro Gly Leu Pro Arg Glu Ser Lys
                650
                                    655
Glu Glu Lys Asp Phe Ala Asp Phe Asp Ile Phe Asp Asp Pro Asn
                665
                                    670
Thr Pro Phe Ser Thr Phe Asn Phe Gln Tyr Pro Asn Glu Ala Phe
                680
                                    685
Lys Arg Leu His Asp Leu Met Glu Phe Asn Thr Leu Asn Asn Leu
                695
                                    700
Asp Val Ile Lys Gln Ala Met Met Glu Ser Ile Glu Tyr Arg Lys
                                    715
Glu Asn Pro Ser Arg Cys Ser Val Ser Leu Ser Ser Val Glu Ala
                725
                                    730
Arg Arg Phe Phe Asn Lys Asn Asn Leu Asn Asn His Thr
                                    745
```

<210> 9
<211> 456

<213> Rattus norvegicus

<300> <308> g1817556

<400> 9 Met Cys Pro Gly Leu Trp Gly Thr Cys Phe Trp Leu Trp Gly Ser Leu Leu Trp Leu Ser Ile Gly Arg Ser Gly Asn Val Pro Pro Thr 20 25 Thr Gln Pro Lys Cys Thr Asp Phe Gln Ser Ala Asn Leu Leu Arg 35 Gly Thr Asn Leu Lys Val Gln Phe Leu Leu Phe Thr Pro Ser Asp Pro Gly Cys Gly Gln Leu Val Glu Glu Asp Ser Asp Ile Arg Asn Ser Glu Phe Asn Ala Ser Leu Gly Thr Lys Leu Ile Ile His Gly 85 Phe Arg Ala Leu Gly Thr Lys Pro Ser Trp Ile Asn Lys Phe Ile 95 100 Arg Ala Leu Leu Arg Ala Ala Asp Ala Asn Val Ile Ala Val Asp 110 115 Trp Val Tyr Gly Ser Thr Gly Met Tyr Phe Ser Ala Val Glu Asn 125 130 Val Val Lys Leu Ser Leu Glu Ile Ser Arg Phe Leu Ser Lys Leu 140 145 Leu Glu Leu Gly Val Ser Glu Ser Ser Ile His Ile Ile Gly Val 155 160 Ser Leu Gly Ala His Val Gly Gly Met Val Gly His Phe Tyr Lys 170 175 Gly Gln Leu Gly Arg Ile Thr Gly Leu Asp Pro Ala Gly Pro Glu 190 Tyr Thr Arg Ala Ser Leu Glu Glu Arg Leu Asp Ser Gly Asp Ala 205 Leu Phe Val Glu Ala Ile His Thr Asp Thr Asp Asn Leu Gly Ile 220 Arg Ile Pro Val Gly His Val Asp Tyr Phe Val Asn Gly Gly Gln 230 235 Asp Gln Pro Gly Cys Pro Ala Phe Ile His Ala Gly Tyr Ser Tyr 245 250 255 Leu Ile Cys Asp His Met Arg Ala Val His Leu Tyr Ile Ser Ala 260 265 270 Leu Glu Asn Thr Cys Pro Leu Met Ala Phe Pro Cys Ala Ser Tyr 275 280 285 Lys Ala Phe Leu Ala Gly Asp Cys Leu Asp Cys Phe Asn Pro Phe 290 295 Leu Leu Ser Cys Pro Arg Ile Gly Leu Val Glu Arg Gly Gly Val 305 310 Lys Ile Glu Pro Leu Pro Lys Glu Val Arg Val Tyr Leu Gln Thr 325 Thr Ser Ser Ala Pro Tyr Cys Val His His Ser Leu Val Glu Phe 340 Asn Leu Lys Glu Lys Arg Lys Lys Asp Thr Ser Ile Glu Val Thr 355 360

```
Phe Leu Gly Asn Asn Val Thr Ser Ser Val Lys Ile Thr Ile Pro
               365
                                    370
Lys Asp His Leu Glu Gly Arg Gly Ile Ile Ala His Gln Asn Pro
                380
                                   385
His Cys Gln Ile Asn Gln Val Lys Leu Lys Phe His Ile Ser Ser
                395
                                   400
Arg Val Trp Arg Lys Asp Arg Thr Pro Ile Val Gly Thr Phe Cys
               410
                                   415
Thr Ala Pro Leu Pro Val Asn Asp Ser Lys Lys Thr Val Cys Ile
                                    430
Pro Glu Pro Val Arg Leu Gln Val Ser Met Ala Val Leu Arg Asp
                                   445
Leu Lys Met Ala Cys Val
                455
```

<210> 10
<211> 5
<212> PRT
<213> Homo sapiens

<220>
<221> unsure
<222> 2, 4
<223> unknown, or other

<220>
<221> misc_feature
<223> motif

<400> 10
Gly Xaa Ser Xaa Gly

1